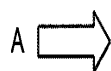
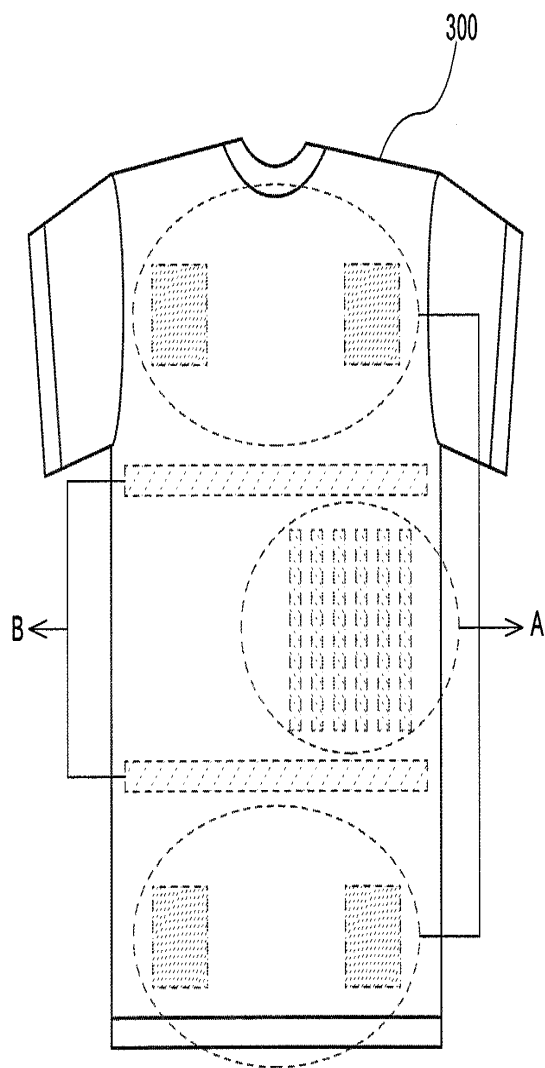
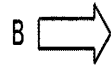


FIG.1

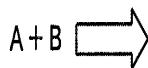


FIRST EMBODIMENT:
CARDIOGRAM MEASUREMENT

SECOND EMBODIMENT:
CARDIOGRAM MEASUREMENT PROCESSING



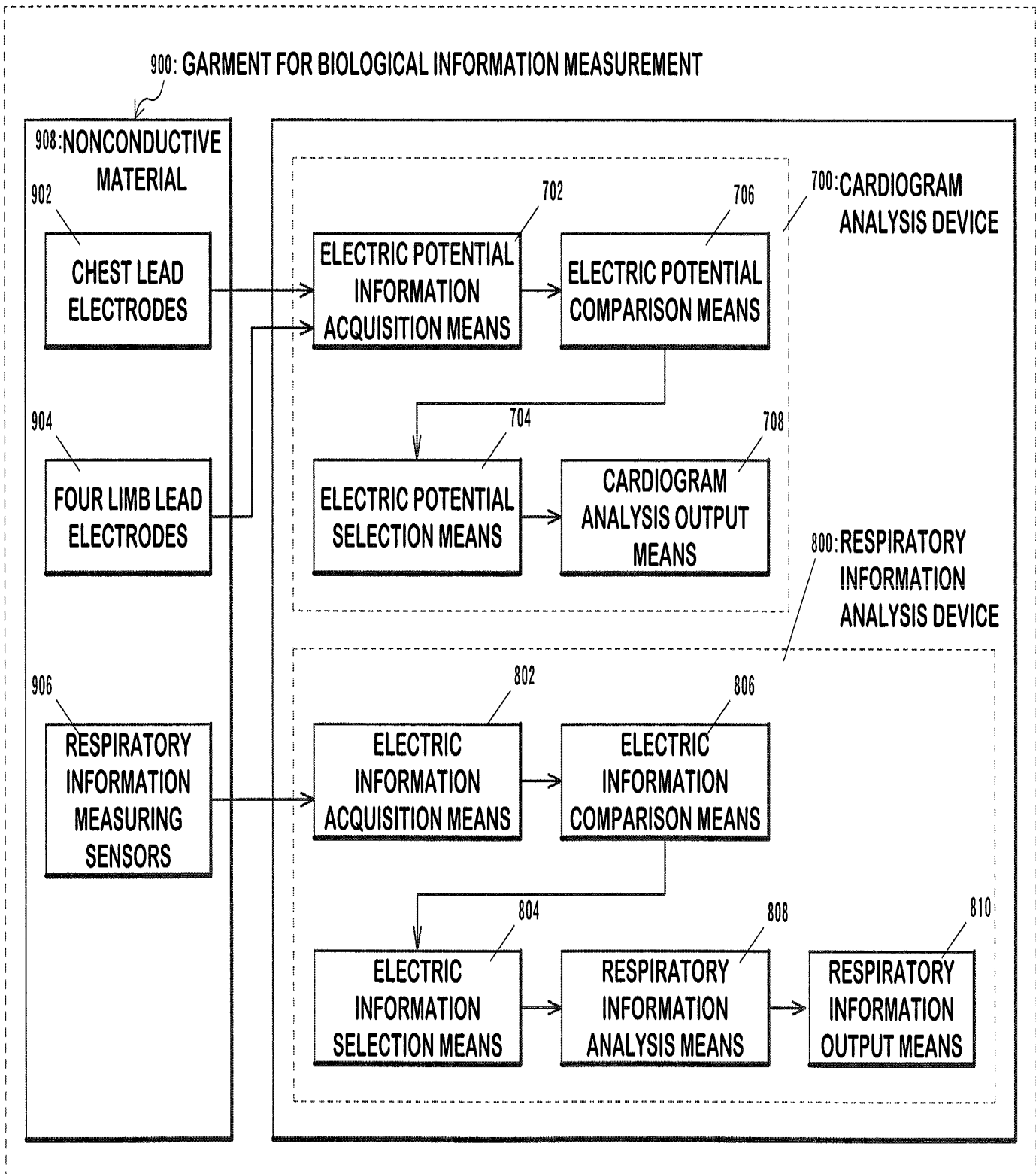
THIRD EMBODIMENT:
RESPIRATION RATE MEASUREMENT PROCESSING



FOURTH EMBODIMENT:
RESPIRATION RATE MEASUREMENT PROCESSING
(IN COMBINATION WITH CARDIOGRAM R-WAVE
ANALYSIS)

FIG.2

1000: BIOLOGICAL INFORMATION MEASUREMENT SYSTEM



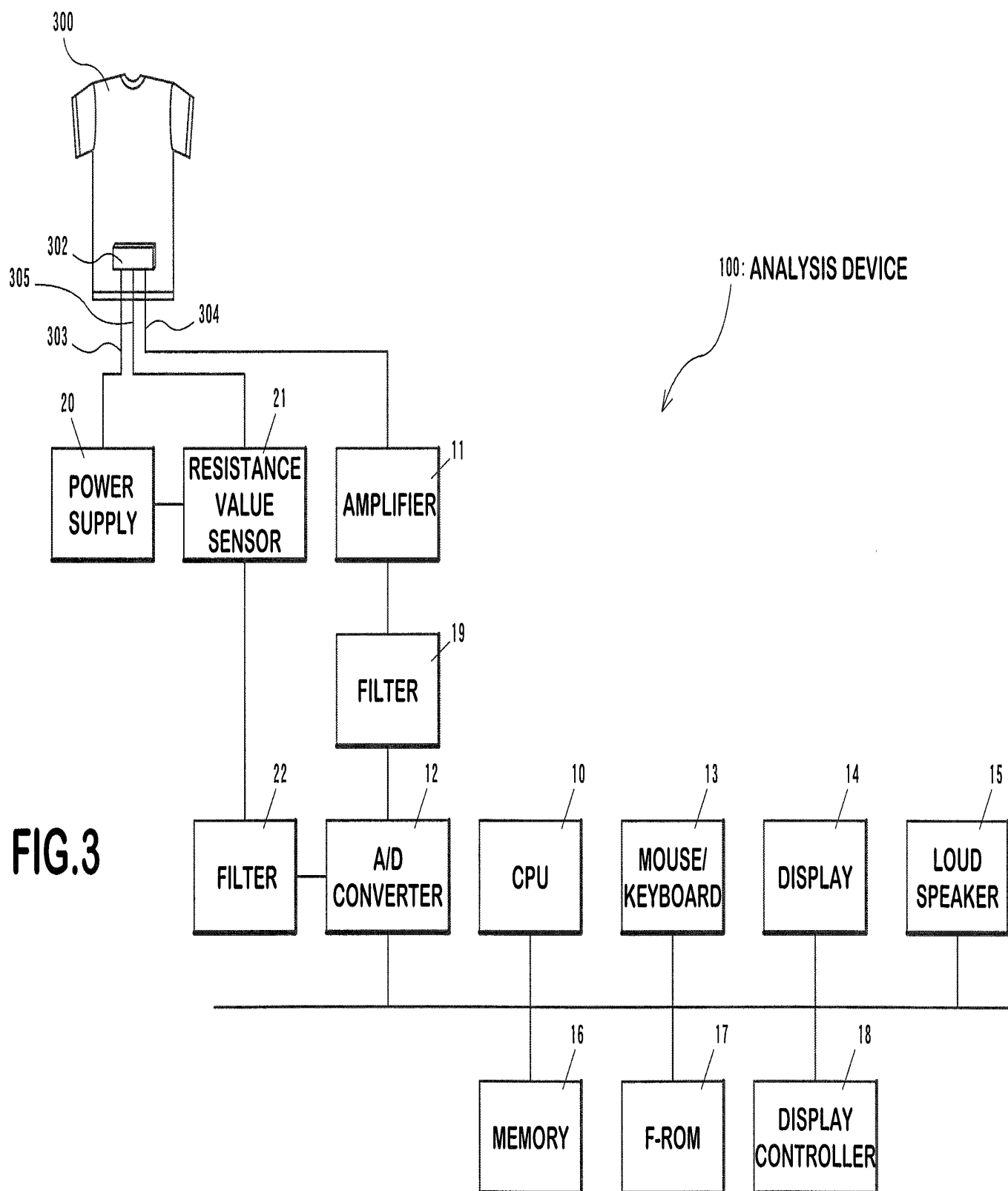


FIG. 4A

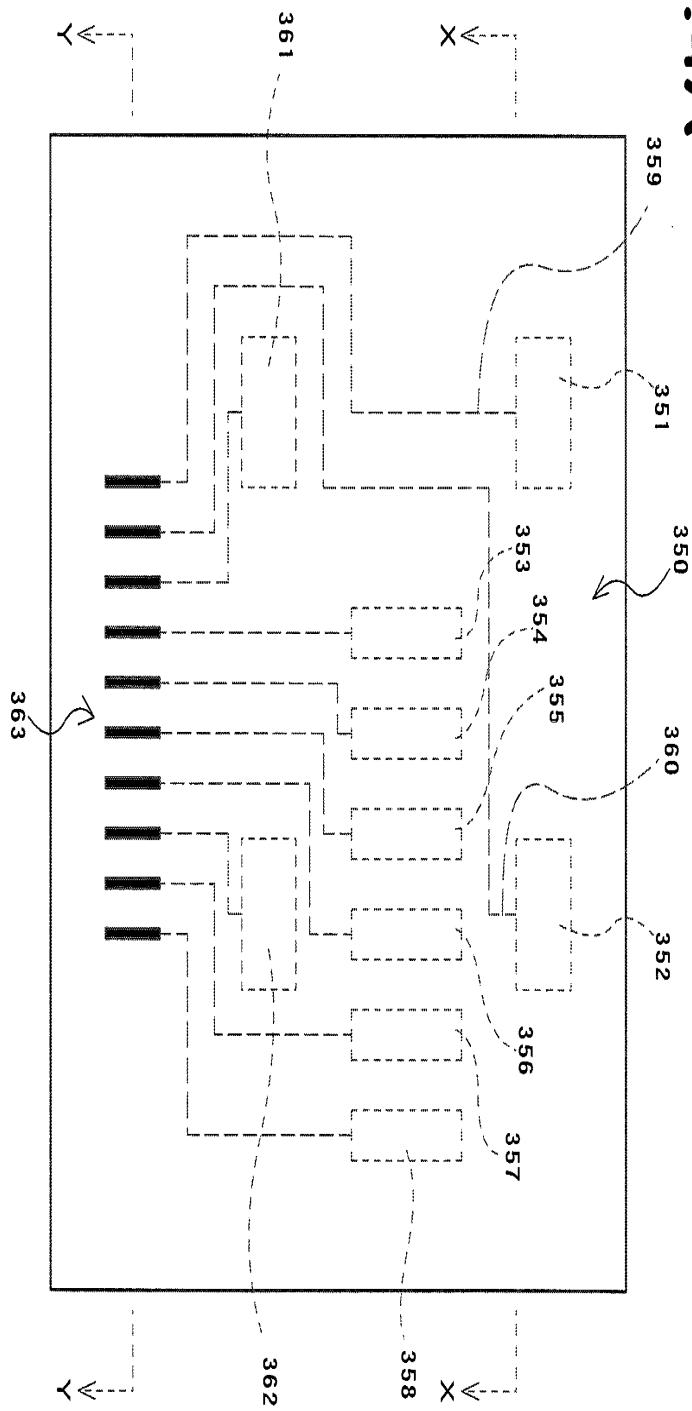


FIG. 4B

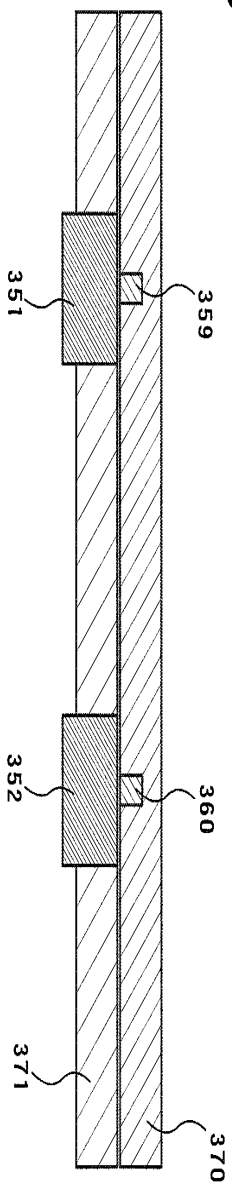


FIG. 4C

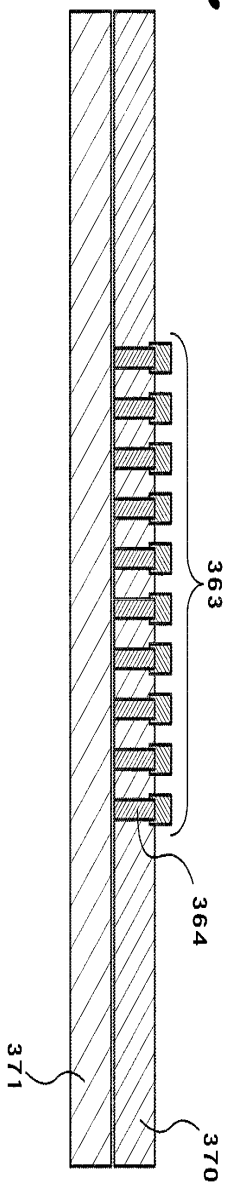


FIG. 5A

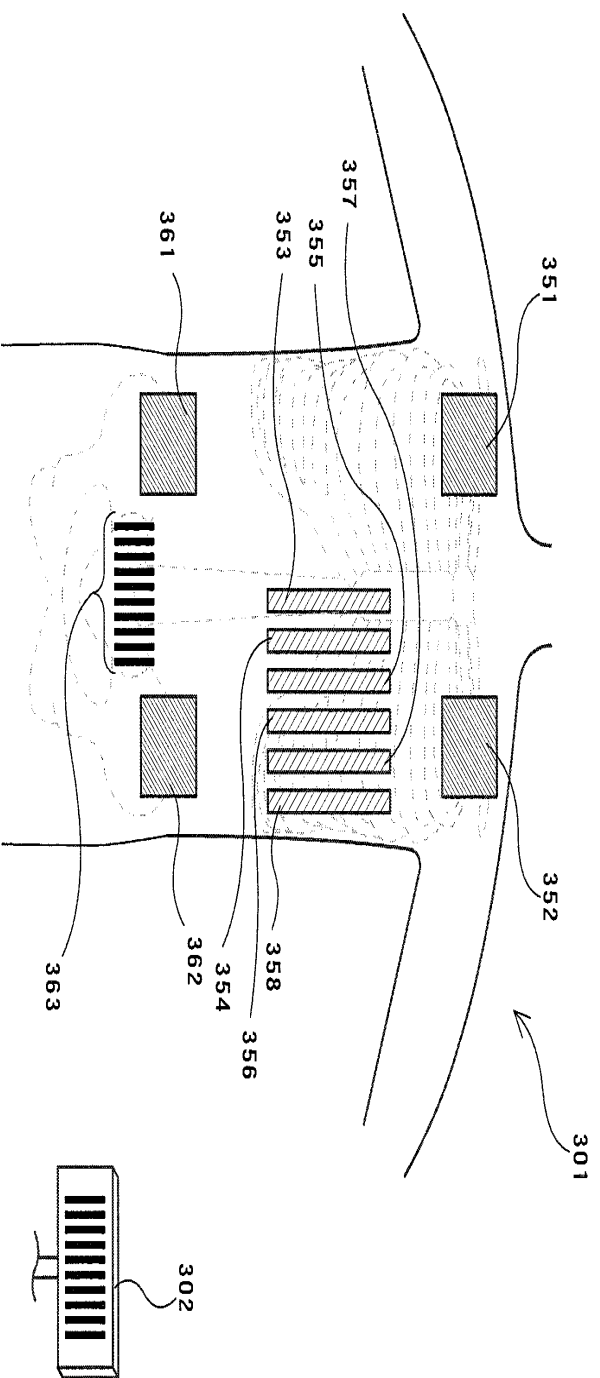


FIG. 5B

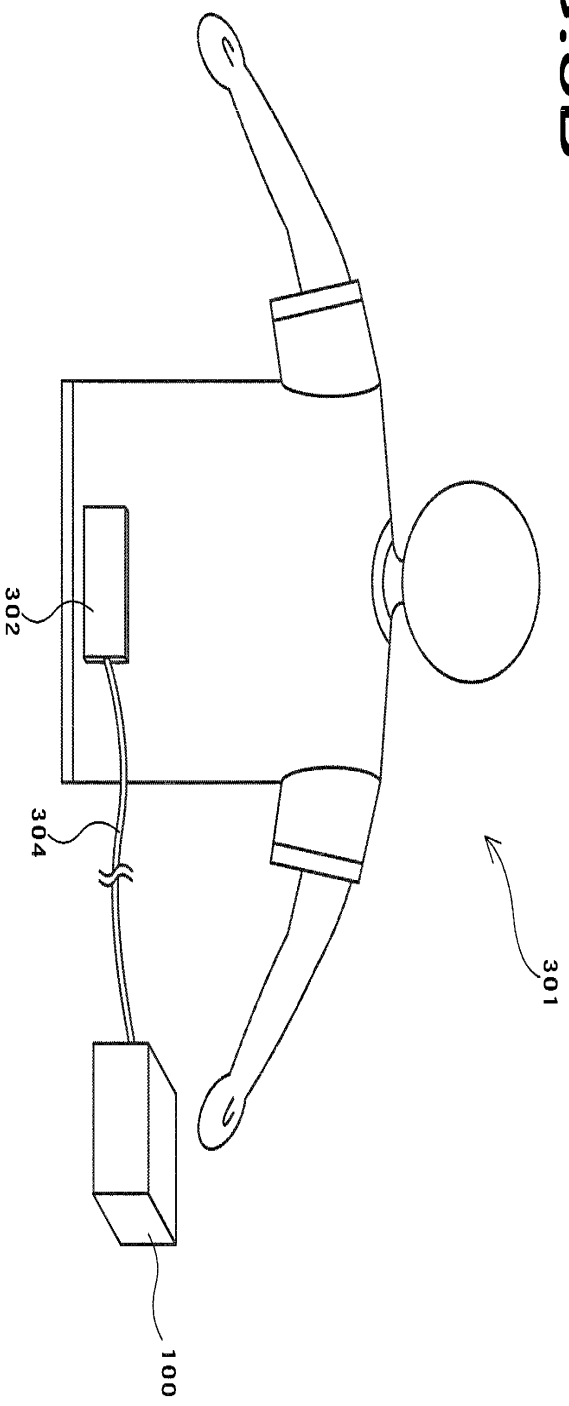


FIG.6

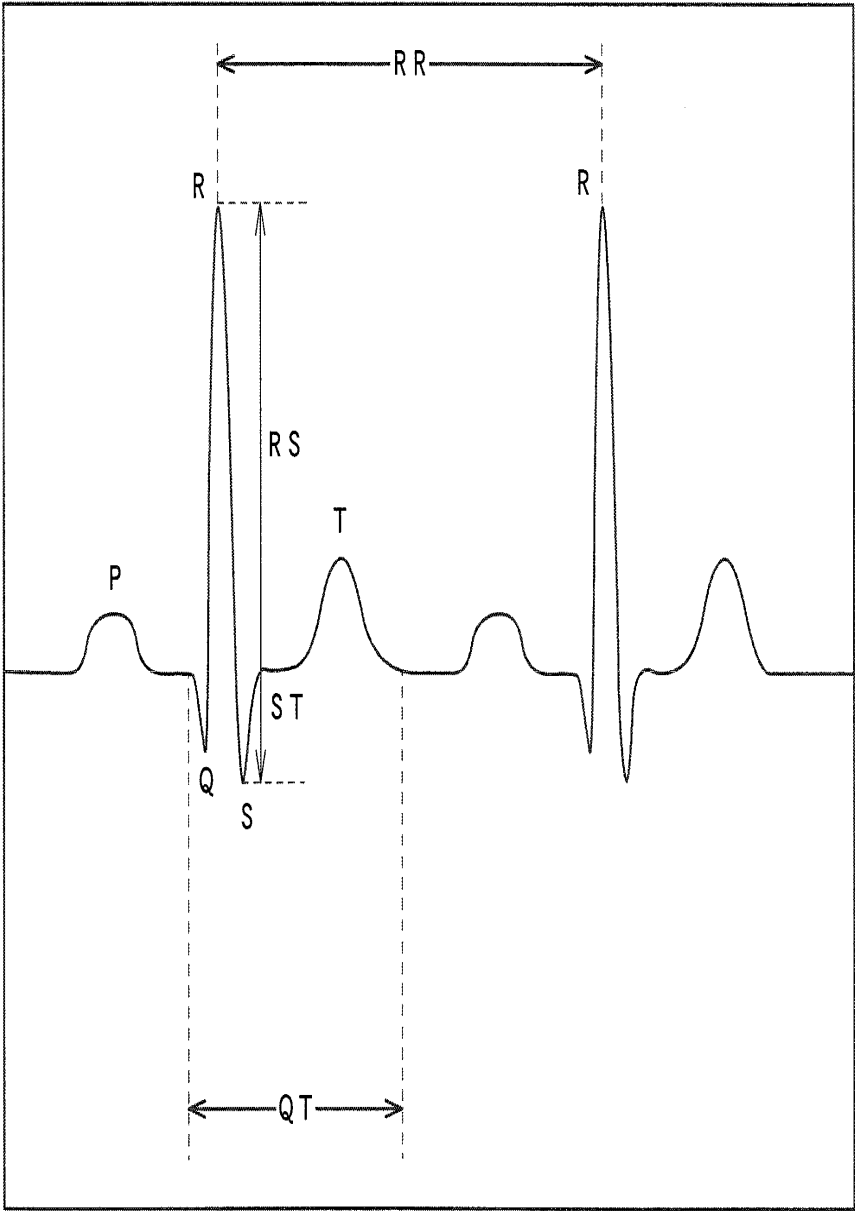


FIG.7

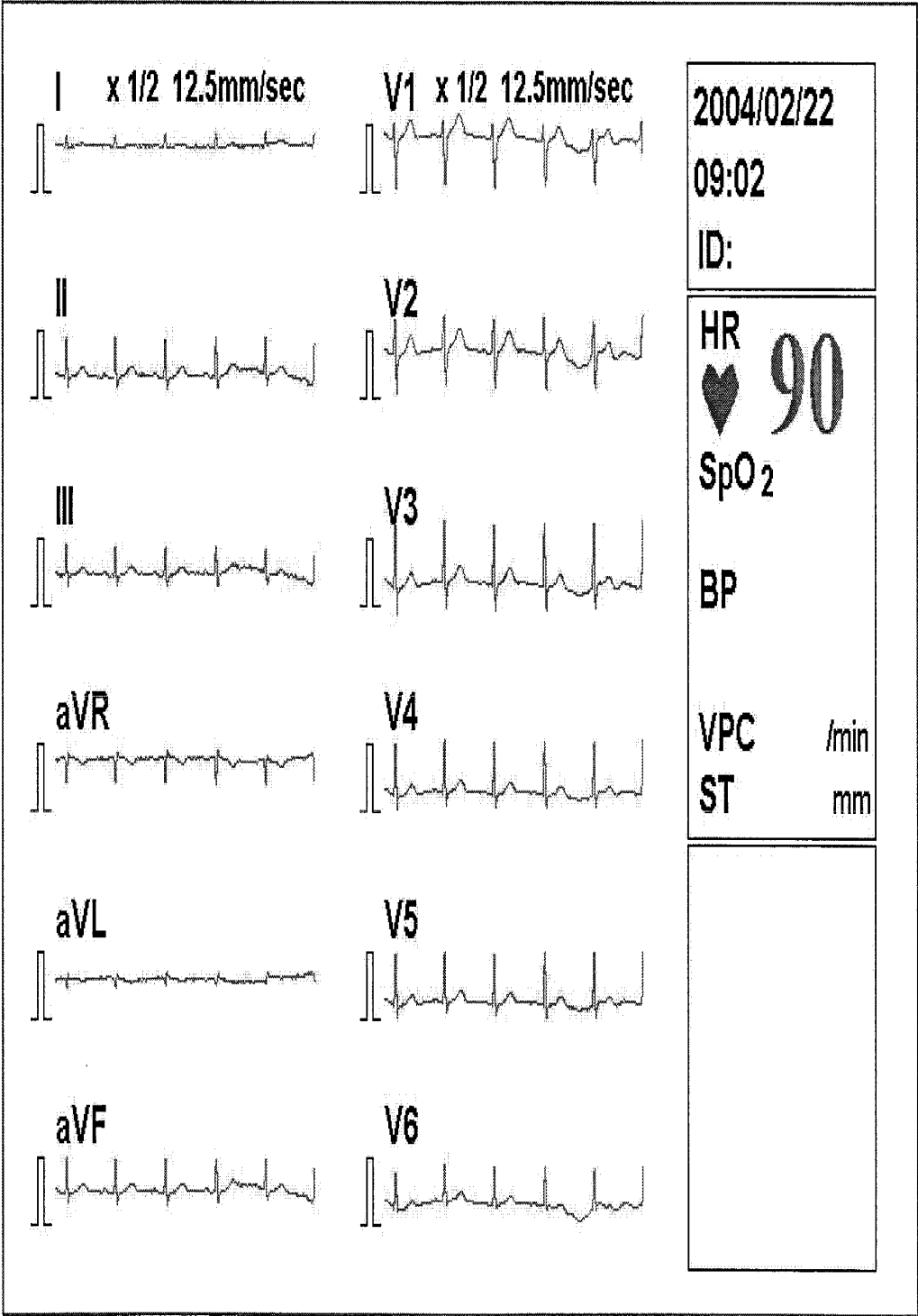


FIG. 8A

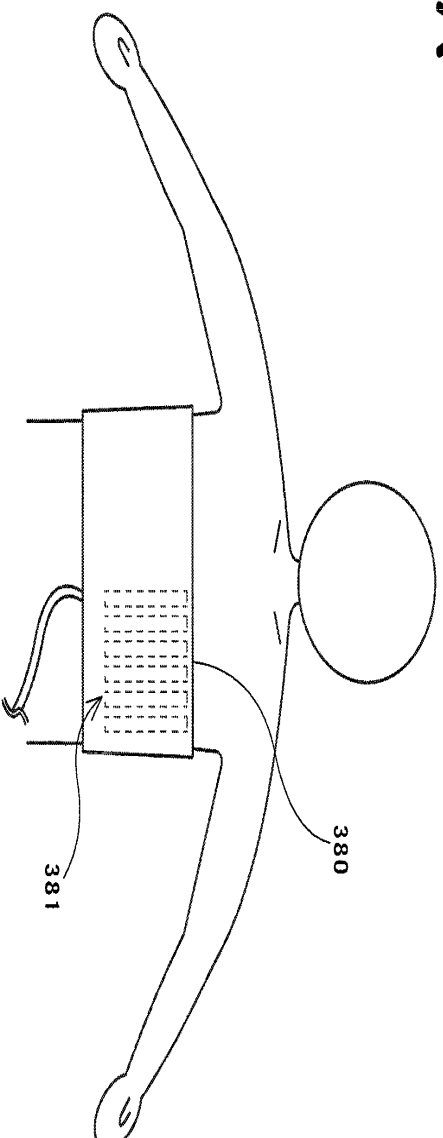


FIG. 8B

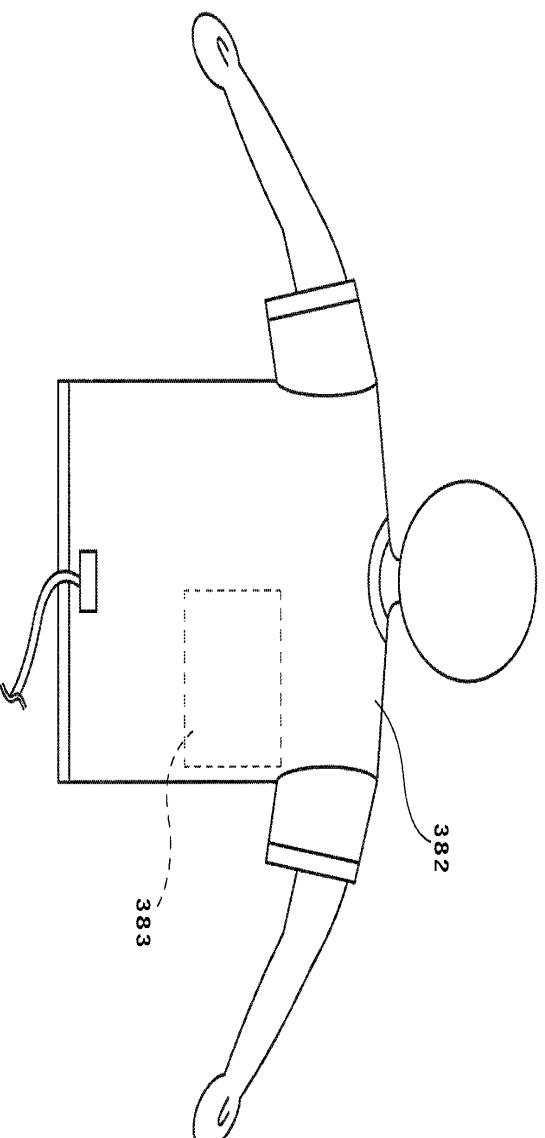


FIG.9

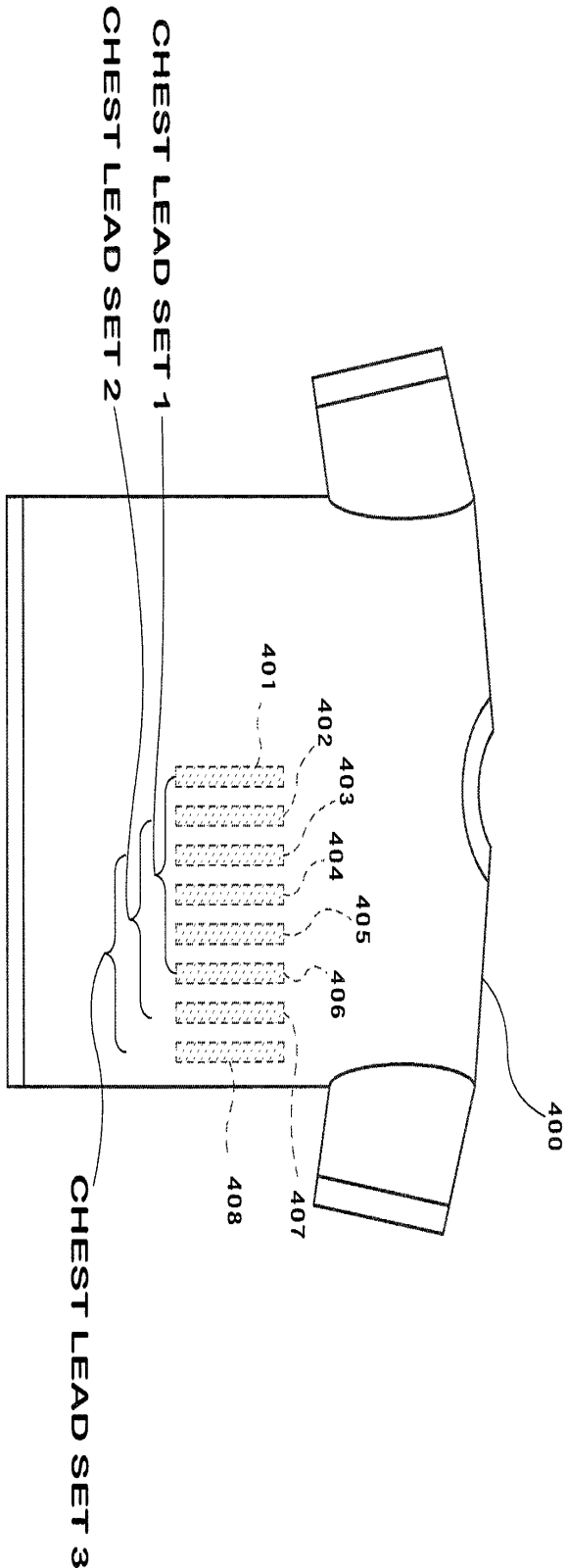


FIG. 10

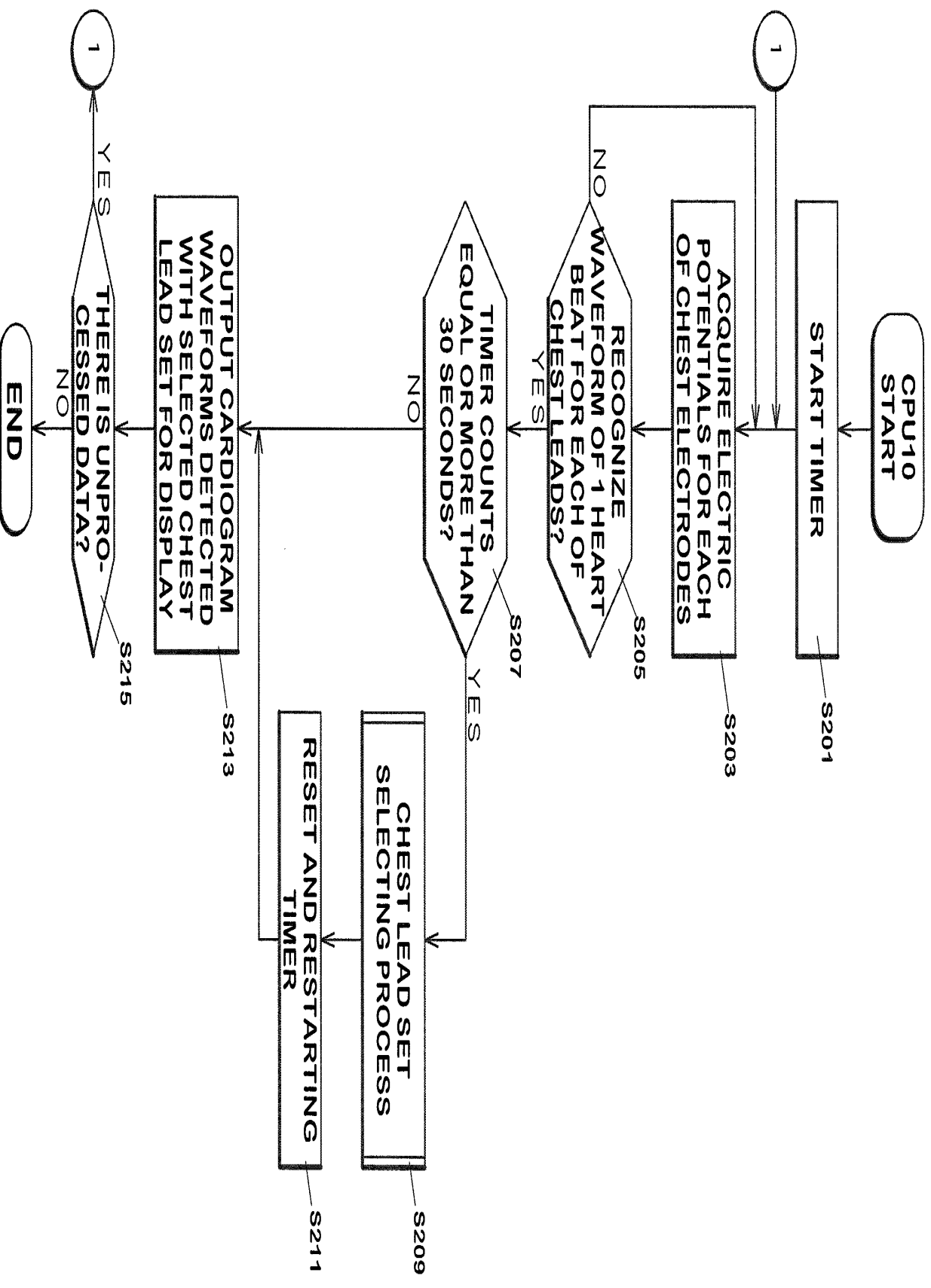


FIG. 11

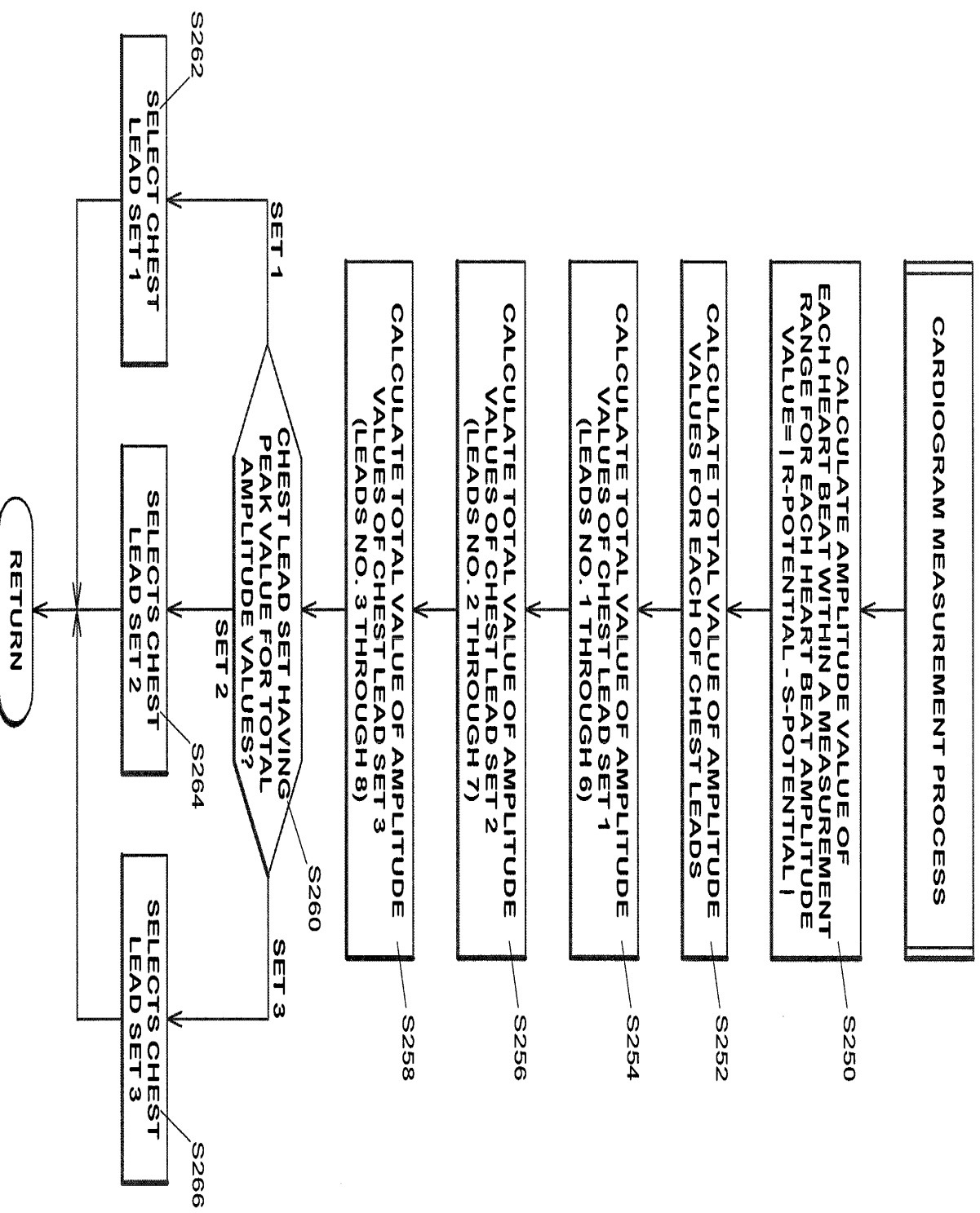


FIG.12A

450

	RS AMPLITUDE VALUE(mV)							
Data No.	CHEST LEAD No.1	No.2	No.3	No.4	No.5	No.6	No.7	No.8
1501	0.05	0.51	0.68	0.55	0.85	0.68	0.56	0.35
1502	0.09	0.58	0.72	0.54	0.81	0.59	0.48	0.21
1503	0.12	0.61	0.71	0.56	0.79	0.49	0.58	0.20
1504	0.08	0.61	0.65	0.54	0.78	0.42	0.49	0.58
1504	0.12	0.59	0.72	0.55	0.81	0.51	0.48	0.19
1530	0.11	0.59	0.71	0.66	0.79	0.54	0.48	0.18

FIG.12B

452

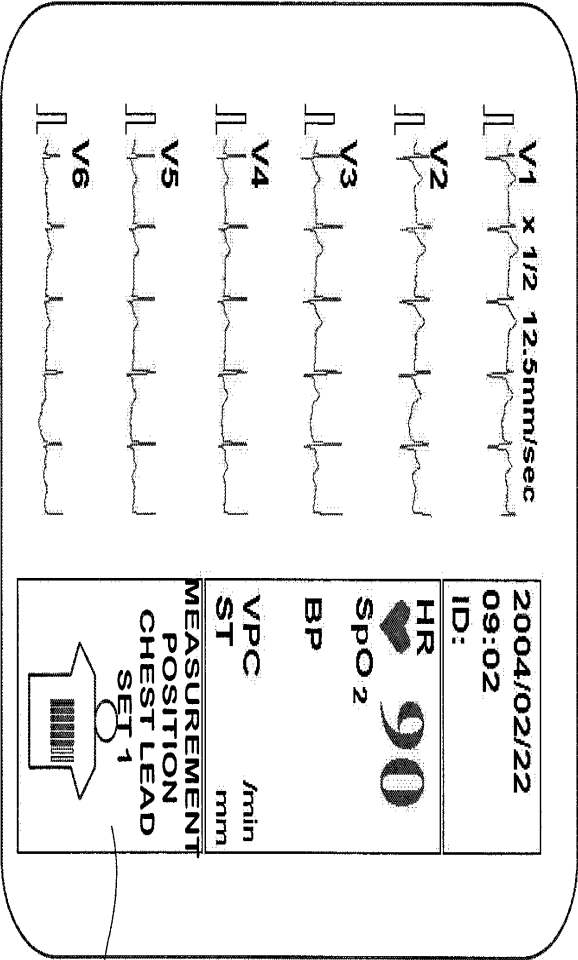
	TOTAL OF RS AMPLITUDE VALUES(mV)							
Data No.	CHEST LEAD No.1	No.2	No.3	No.4	No.5	No.6	No.7	No.8
1501-1530	2.85	17.45	20.95	17.00	24.15	16.15	15.35	8.55

FIG.12C

454

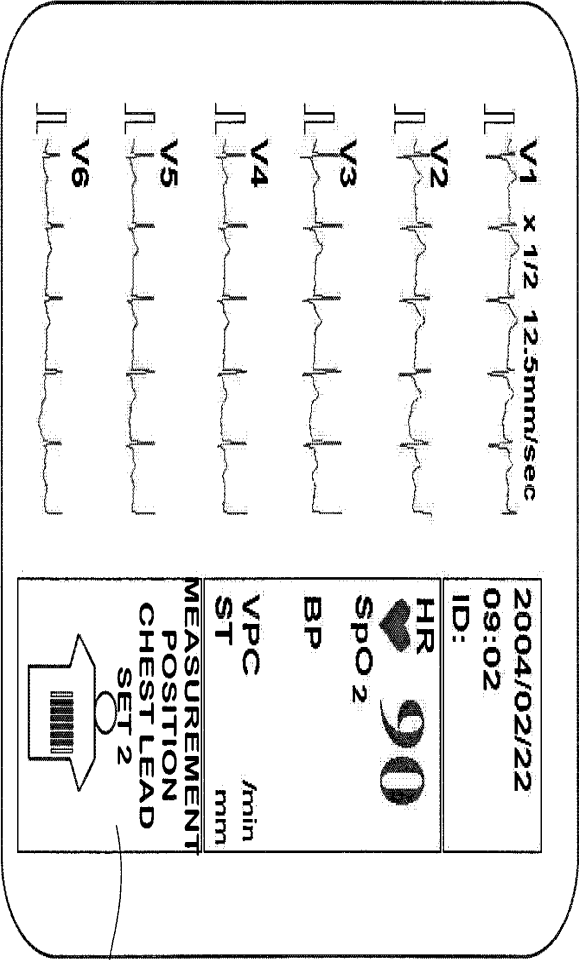
	TOTAL OF RS AMPLITUDE VALUES(mV)		
Data No.	CHEST LEAD SET 1 (LEADS No. 1 THROUGH 6)	CHEST LEAD SET 2 (LEADS No. 2 THROUGH 7)	CHEST LEAD SET 2 (LEADS No. 3 THROUGH 8)
1501-1530	98.55	111.05	102.15

FIG.13A



480

FIG.13B



481

FIG. 14

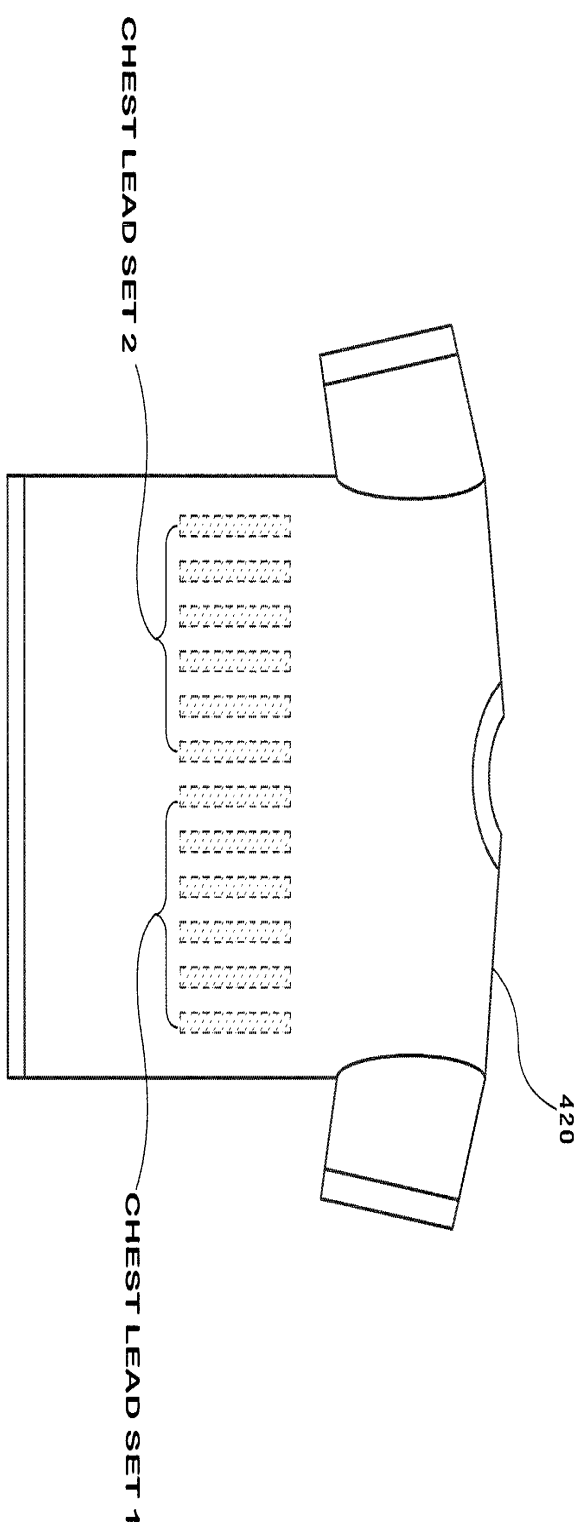


FIG. 15A

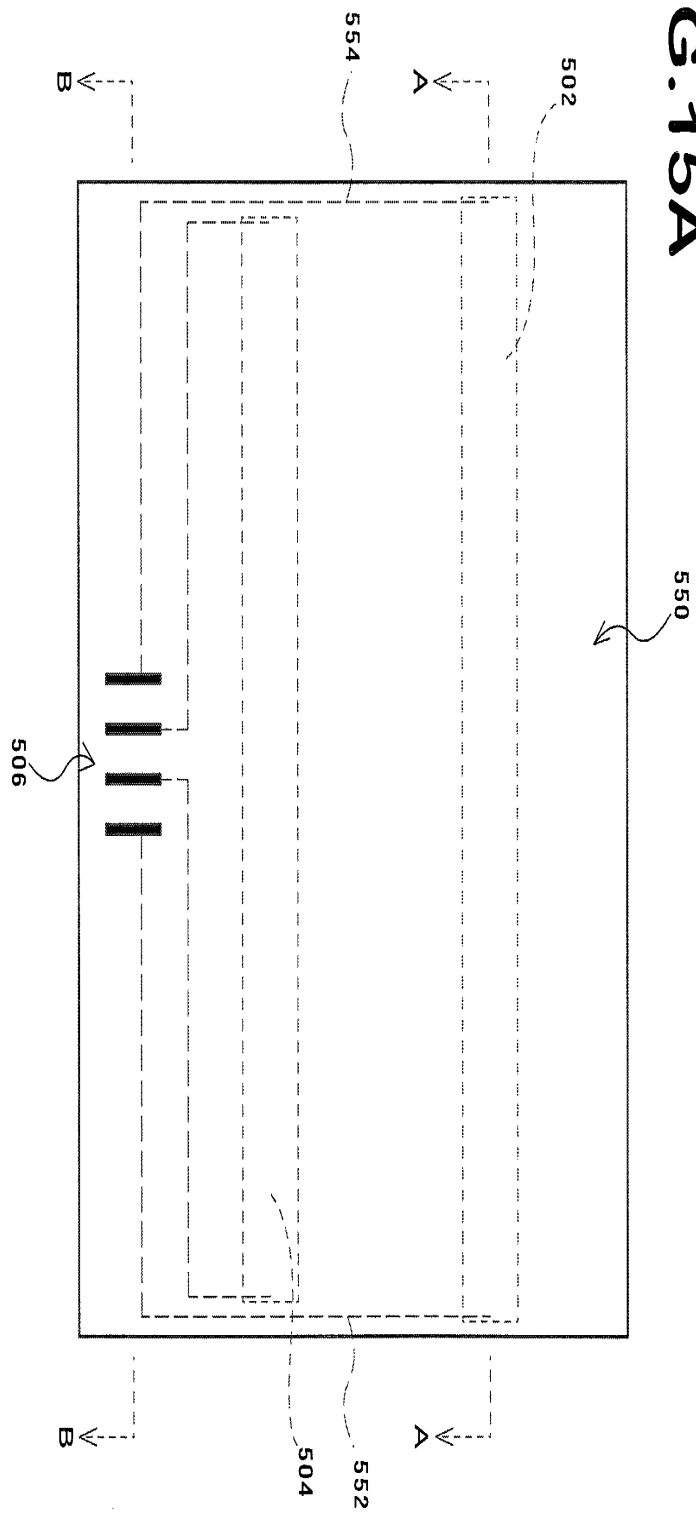


FIG. 15B

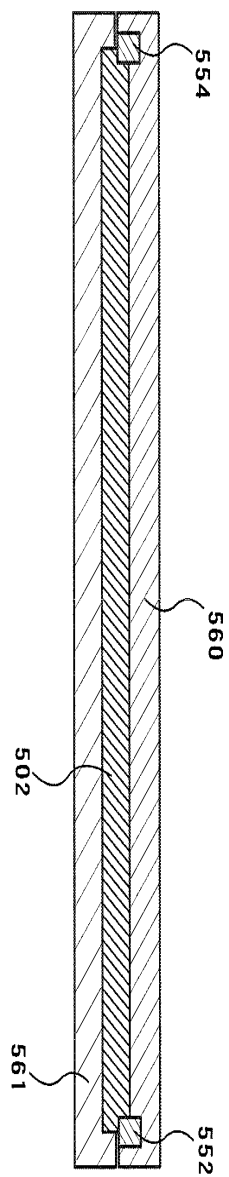


FIG. 15C

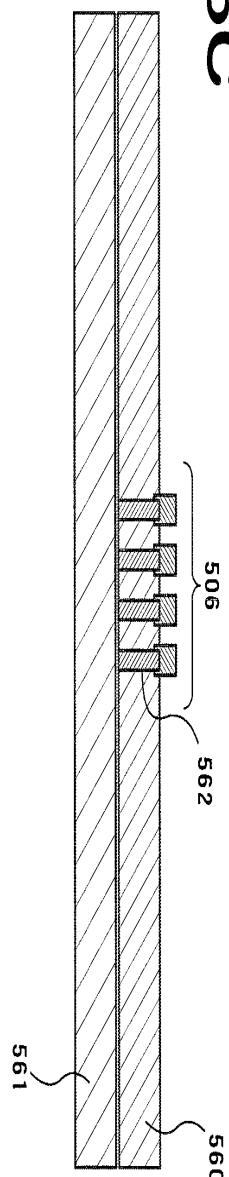


FIG. 16A

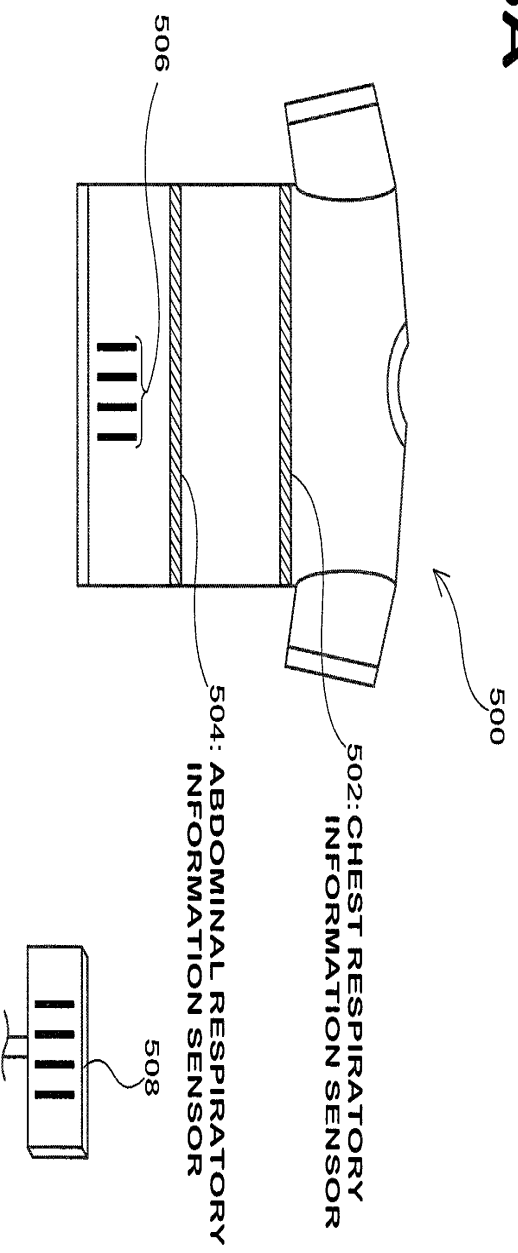


FIG. 16B

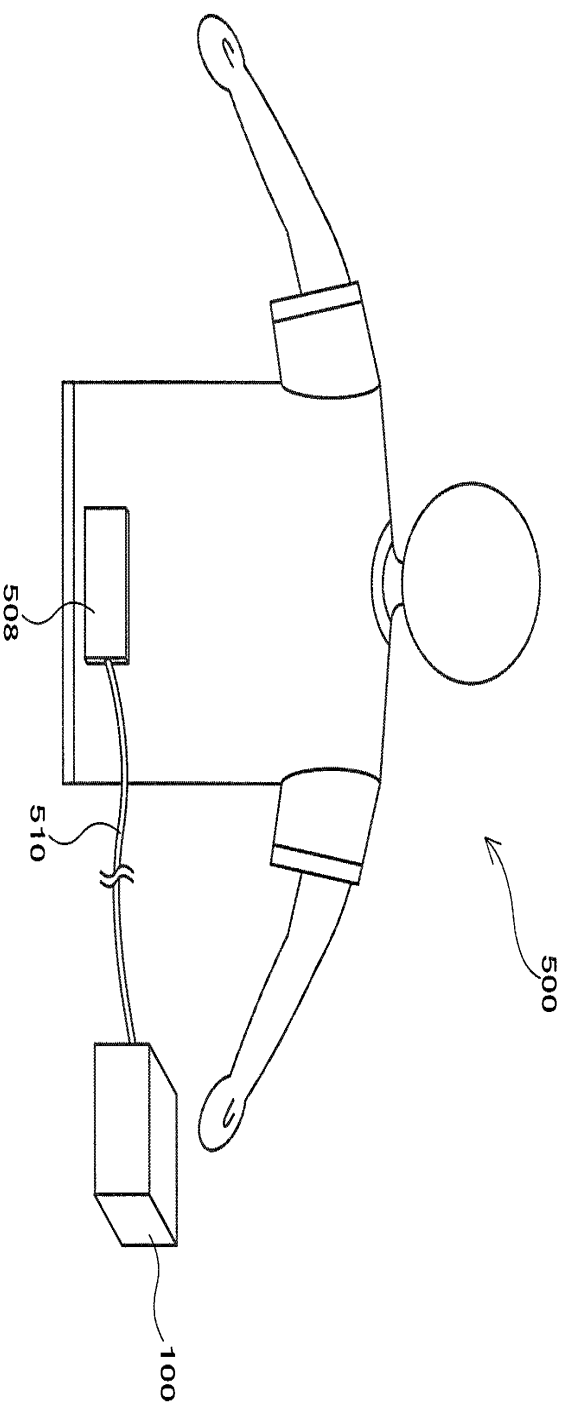


FIG.17

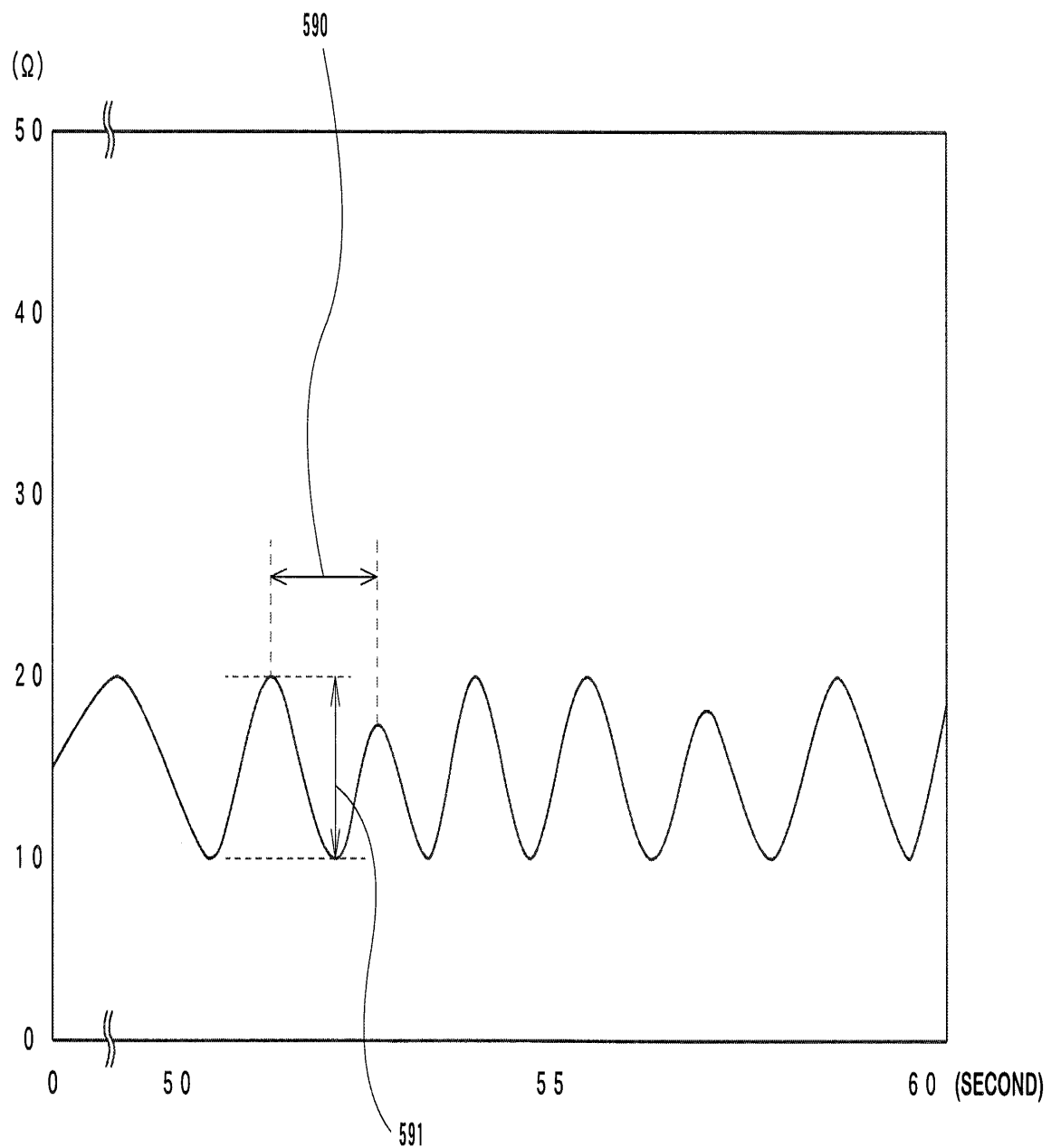


FIG. 18

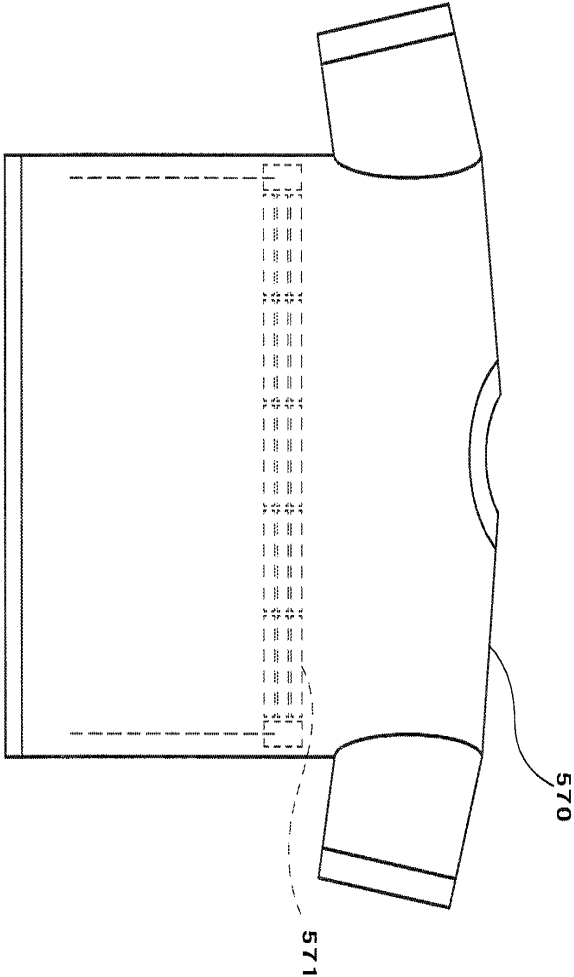


FIG. 19A

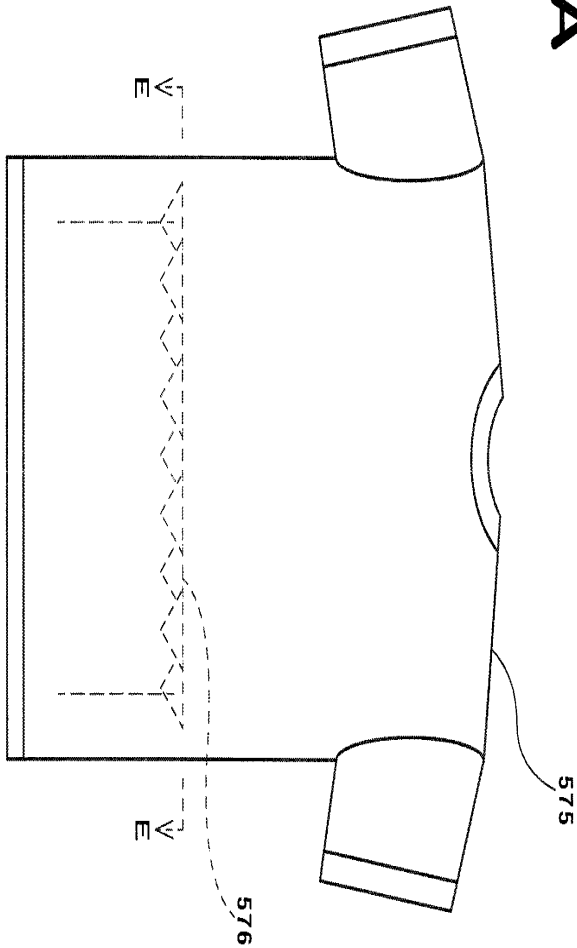


FIG. 19B

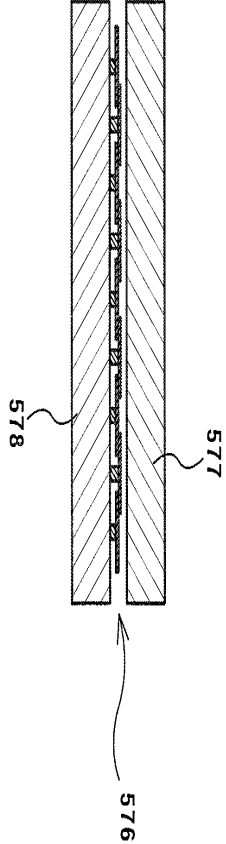


FIG. 20

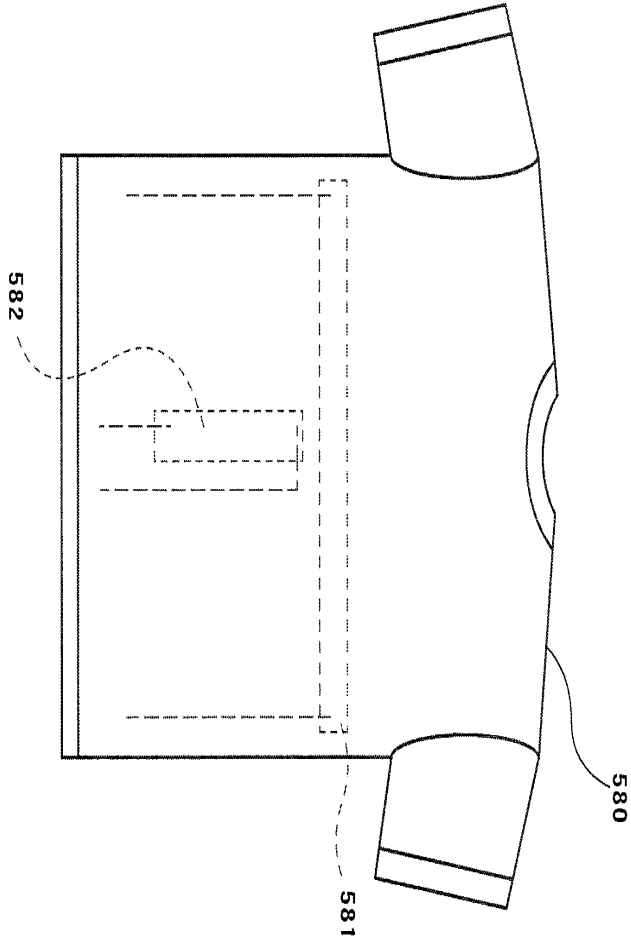


FIG. 21

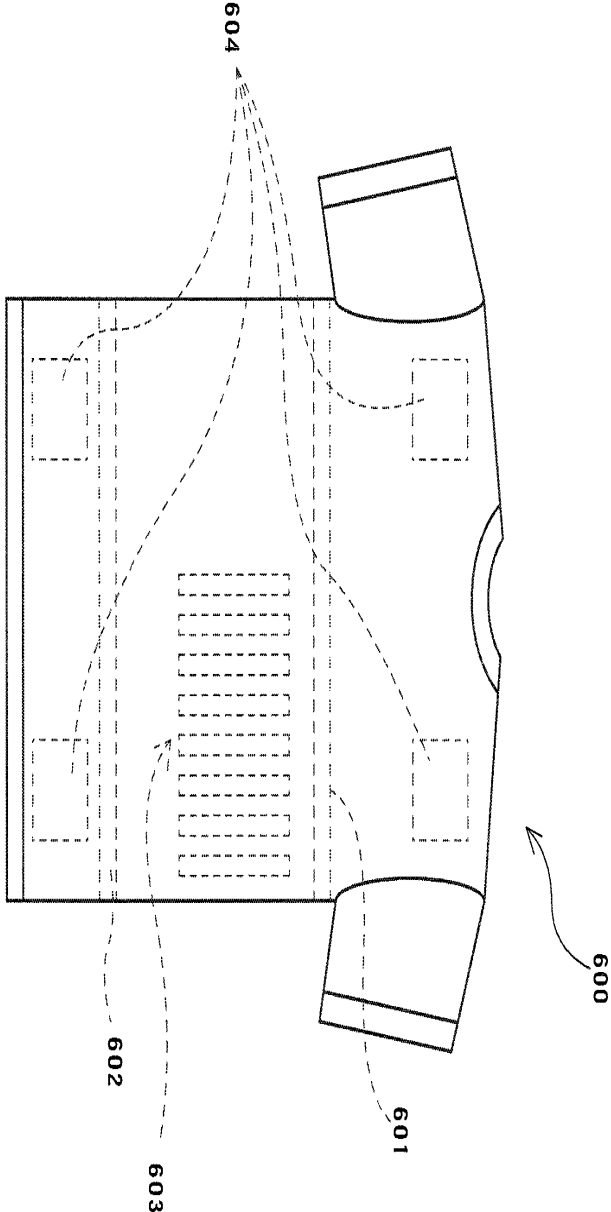


FIG.22

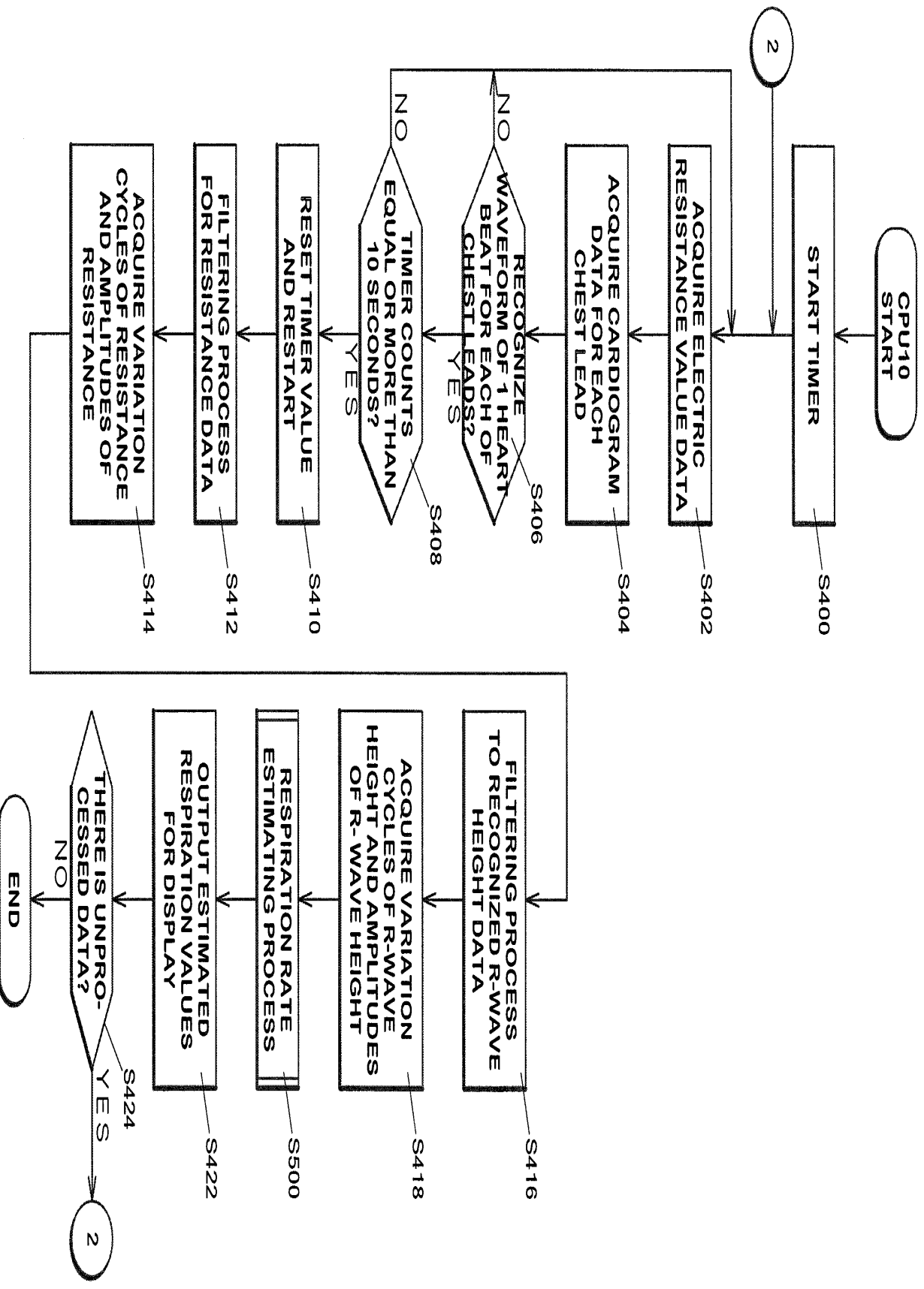


FIG.23

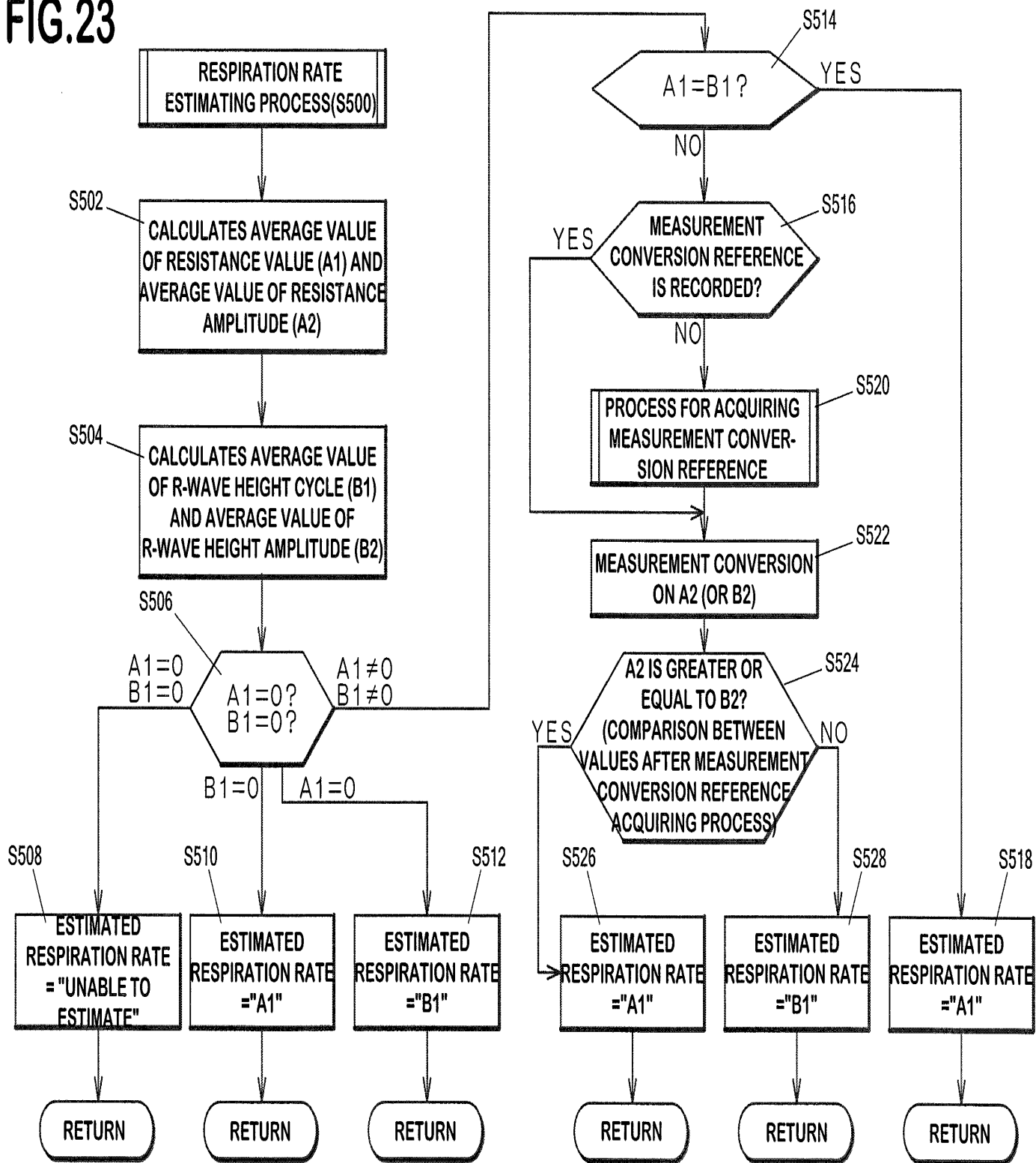


FIG.24

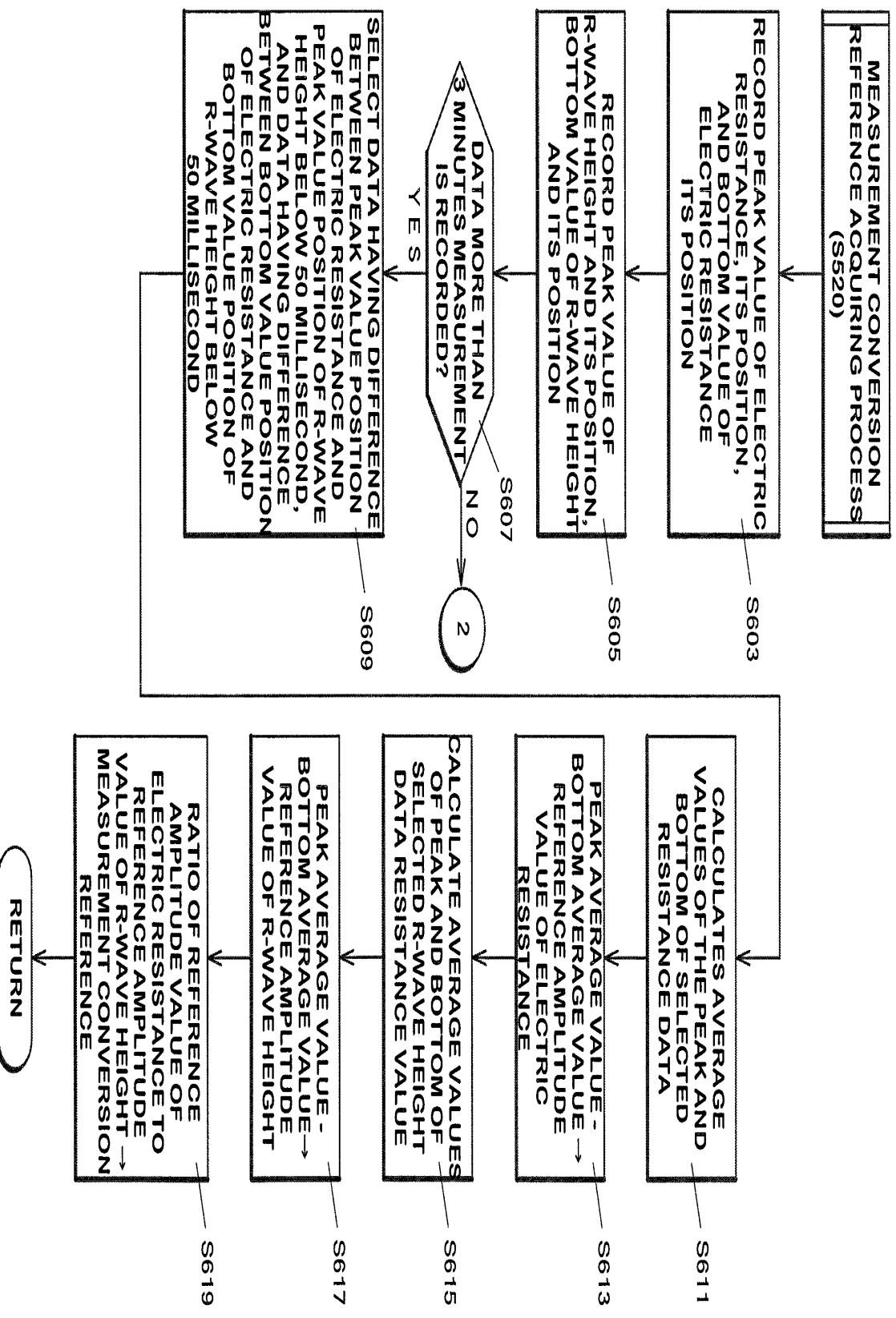


FIG.25A

Data No.	RESISTANCE VALUE CYCLE (Hz)	R-WAVE HEIGHT CYCLE (Hz)	RESISTANCE VALUE AMPLITUDE (Ω)	R-WAVE HEIGHT AMPLITUDE (mV)
1801	0.26	0.25	10.70	0.23
1802	0.28	0.24	10.80	0.23
1803	0.25	0.26	10.60	0.24
AVERAGE	0.26	0.25	10.70	0.23

FIG.25B

Data No.	RESISTANCE VALUE AMPLITUDE (Ω)	R-WAVE HEIGHT AMPLITUDE (mV)	R-WAVE HEIGHT AMPLITUDE (Ω) (AFTER MEASUREMENT CONVERSION)
1801-1803			
AVERAGE	10.70	0.23	10.81

FIG.26A

Data No.	PEAK RESISTANCE VALUE (Ω)	PEAK POSITION (sec)	R-WAVE HEIGHT PEAK VALUE(mV)	PEAK POSITION (sec)	BOTTOM RESISTANCE VALUE (Ω)	BOTTOM POSITION (sec)	R-WAVE HEIGHT BOTTOM VALUE (mV)	BOTTOM POSITION (sec)
1501	19.2	2.502	0.70	2.498	7.9	4.402	0.51	4.395
1502	18.9	6.491	0.72	6.391	8.4	8.382	0.52	8.330
1503	19.1	10.380	0.69	10.260	8.2	12.520	0.49	12.460
1504	18.7	14.270	0.72	14.245	7.6	16.100	0.56	16.045
1543	18.9	168.200	0.78	168.180	8.1	170.150	0.52	170.148

FIG.26B

Data No.	PEAK RESISTANCE VALUE (Ω)	PEAK POSITION (sec)	R-WAVE HEIGHT PEAK VALUE(mV)	PEAK POSITION (sec)	BOTTOM RESISTANCE VALUE (Ω)	BOTTOM POSITION (sec)	R-WAVE HEIGHT BOTTOM VALUE (mV)	BOTTOM POSITION (sec)
1501	19.2	2.502	0.70	2.498	7.9	4.402	0.51	4.395
1543	18.9	168.200	0.78	168.180	8.1	170.150	0.52	170.148
AVERAGE	19.1	—	0.75	—	7.9	—	0.51	—

FIG.26C

Data No.	REFERENCE AMPLITUDE VALUE OF ELECTRIC RESISTANCE (Ω) (X)	REFERENCE AMPLITUDE VALUE OF R-WAVE HEIGHT (mV) (X)	MEASUREMENT CONVERSION REFERENCE (X/Y)
1501-1543	11.2	0.24	47

FIG. 27

